	Application No.	Applicant(s)	
Notice of Allowability	09/998,225	ABE ET AL.	
	Examiner	Art Unit	
	Kuen S. Lu	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to _October 11, 2005_.

2. ☒ The allowed claim(s) is/are _25-46_.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☒ All   b) ☐ Some*   c) ☐ None of the:
        1. ☒ Certified copies of the priority documents have been received.
        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the
           International Bureau (PCT Rule 17.2(a)).
    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .
    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of
        Paper No./Mail Date _____ .
    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)
1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _#1: 12/16/2005_ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____ .

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 6, 2005 has been entered.

2. After a thorough search and examination of the present application, and in light of the prior art made of record and Applicant's response of October 6, 2005, Claims 26-46 are allowed.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Reginald D. Lucas (Registration: 46,883) on December 16, 2005. The interview summary is attached.

Please amend claims 23-25, 30, 35, 41 and 46 in accordance with the following:

23. (Currently Cancelled)

24. (Currently Cancelled)

25. (Currently Amended) A pattern retrieving method for use with a pattern retrieval apparatus connected to a plurality of terminal devices through a network, comprising:

receiving, from a terminal apparatus, a search condition set that comprises a search-pattern and a search-formula used when searching through data constituting a search target, together with a terminal apparatus identifier that identifies the terminal apparatus associated with a search condition set;

storing search condition sets and terminal apparatus identifiers received from one or more of the terminal apparatuses into a search-condition buffer; and

when investigation determines that no preceding search-process is in progress and that two or more search-patterns are same as each other among those stored in the search-condition buffer;

leaving a first of the same search-patterns in the search-condition buffer and erasesing second and further ones being same to the first one;

generating a search-pattern-variable table containing and correlating the search-pattern and a first variable that makes the search-pattern an associated value;

further generating a search-query-formula- variable table containing and correlating, in a manner based on search-formulas and the terminal apparatus identifiers stored in the search-condition buffer and the generated search-pattern-variable table,

a first search-query formula describing the search-pattern in a form using

the first variable; and

a second variable that makes the first search-query formula the associated value and

further correlatinges the terminal apparatus identifier with a second search-query-

formula describing the first search-query-formula- in a form using the second variable

and the second variable that makes the first search-query-formula the associated value,

and searching through a search-target database containing said data of the search-

target according to the search-query-formula-_variable table for extracting a data set that

matches with the search condition set received from any of the plurality of terminal

apparatuses as a search result; and

transmitting the search result back to a relevant terminal apparatus.

30. (Currently Amended) A pattern retrieval apparatus connected to a plurality of terminal

devices through a network, comprising:

a retrieval condition reception unit, receiving, from a terminal apparatus, a search condition

set that comprises a search-pattern and a search-formula used when searching through data

constituting a search target, together with a terminal apparatus identifier that identifies the

terminal apparatus associated with a search condition set;

a retrieval condition buffer unit, storing search condition sets and terminal apparatus

identifiers received from one or more of the terminal apparatuses into a search-condition

buffer;

a retrieving process determination unit for investigating and when investigation and

determines no preceding search-process is in progress and that two or more search-patterns

are same as each other among those stored in the search-condition buffer, leaving a first of the same search-patterns in the search-condition buffer and erasing second and further ones being same to the first one;

a variable table generating unit generating a search-pattern-variable table containing and correlating the search-pattern and a first variable that makes the search-pattern an associated value and further generating a search-query-formula- variable table containing and correlating, in a manner based on search-formulas and the terminal apparatus identifiers stored in the search-condition buffer and the generated search-pattern-variable table,

a first search-query formula describing the search-pattern in a form using the first variable; and

a second variable that makes the first search-query formula the associated value and further correlatinges the terminal apparatus identifier with a second search-query-formula describing the first search-query-formula- in a form using the second variable and the second variable that makes the first search-query-formula the associated value, and searching through a search-target database containing said data of the search-target according to the search-query-formula- variable table for extracting a data set that matches with the search condition set received from any of the plurality of terminal apparatuses as a search result; and

a transmission unit transmitting the search result back to a relevant terminal apparatus.

35. (Currently Amended) A computer-readable storage medium storing a program code of a

pattern retrieval program executed by a pattern retrieval apparatus connected to a plurality of

terminal devices through a network, said program code comprising:

receiving, from a terminal apparatus, a search condition set that comprises a search-pattern

and a search-formula and-is-used when searching through data constituting a search target,

together with a terminal apparatus identifier that identifies the terminal apparatus associated

with a search condition set;

storing search condition sets and terminal apparatus identifiers received from one or more of

the terminal apparatuses into a search-condition buffer; and when investigation determines

that no preceding search-process is in progress and that two or more search-patterns are

same as each other among those stored in the search-condition buffer;

leaving a first of the same search-patterns in the search-condition buffer and erasesing second

and further ones being same to the first one;

generating a search-pattern-variable table containing and correlating the search-pattern and

a first variable that makes the search-pattern an associated value;

further generating a search-query-formula-_variable table containing and correlating, in **a**

manner based on search-formulas and the terminal apparatus identifiers stored in the

search-condition buffer and the generated search-pattern-variable table,

a first search-query formula describing the search-pattern in a form using the first variable;

and

a second variable that makes the first search-query formula the associated value and

further correlatinges the terminal apparatus identifier with a second search-query-formula

describing the first search-query-formula- in a form using the second variable and the second

variable that makes the first search-query-formula the associated value, and searching

through a search-target database containing said data of the search-target according to the

search-query-formula- variable table for extracting a data set that matches with the search

condition set received from any of the plurality of terminal apparatuses as a search result;

and

transmitting the search result back to a relevant terminal apparatus.

41. (Currently Amended) A pattern retrieval program executed by a pattern retrieval

apparatus connected to a plurality of terminal devices through a network, comprising:

receiving, from a terminal apparatus, a search condition set that comprises a search-pattern

and a search-formula and is-used when searching through data constituting a search target,

together with a terminal apparatus identifier that identifies the terminal apparatus associated

with a search condition set;

storing search condition sets and terminal apparatus identifiers received from one or more of

the terminal apparatuses into a search-condition buffer; and when investigation determines

that no preceding search-process is in progress and that two or more search-patterns are

same as each other among those stored in the search-condition buffer

leaving a first of the same search-patterns in the search-condition buffer and erasesing

second and further ones being same to the first one,

generating a search-pattern-variable table containing and correlating the search-pattern and

a first variable that makes the search-pattern an associated value;

further generating a search-query-formula-_variable table containing and correlating, in a

manner based on search-formulas and the terminal apparatus identifiers stored in the

search-condition buffer and the generated search-pattern-variable table,

a first search-query formula describing the search-pattern in a form using the first variable;

and

a second variable that makes the first search-query formula the associated value and

further correlatinges the terminal apparatus identifier with a second search-query-formula

describing the first search-query-formula-_in a form using the second variable and the second

variable that makes the first search-query-formula the associated value, and searching

through a search-target database containing said data of the search-target according to the

search-query-formula-_variable table for extracting a data set that matches with the search

condition set received from any of the plurality of terminal apparatuses as a search result;

and

transmitting the search result back to a relevant terminal apparatus.

46. (Currently Amended) A pattern retrieval apparatus connected to a plurality of terminal

devices through a network, comprising:

a retrieval condition reception means, receiving, from a terminal apparatus, a search

condition set that comprises a search-pattern and a search-formula and is-used when

searching through data constituting a search target, together with a terminal apparatus

identifier that identifies the terminal apparatus associated with a search condition set;

a retrieval condition buffer means, storing search condition sets and terminal apparatus identifiers received from one or more of the terminal apparatuses into a search-condition buffer;

a retrieving process determination means for investigating and when determining that no preceding search-process is in progress and that two or more search-patterns are same as each other among those stored in the search-condition buffer, leaving a first of the same search-patterns in the search-condition buffer and erasing second and further ones being same to the first one,

a variable table generating means generating a search-pattern-variable table containing and correlating the search-pattern and a first variable that makes the search-pattern an associated value and further generating a search-query-formula-_variable table containing and correlating, in a manner based on search-formulas and the terminal apparatus identifiers stored in the search-condition buffer and the generated search-pattern-variable table,

a first search-query formula describing the search-pattern in a form using the first variable; and

a second variable that makes the first search-query formula the associated value and further correlatinges the terminal apparatus identifier with a second search-query-formula describing the first search-query-formula-_in a form using the second variable and the second variable that makes the first search-query-formula the associated value, and searching through a search-target database containing said data of the search-target according to the search-query-formula-_variable table for extracting a data set that matches with the search

condition set received from any of the plurality of terminal apparatuses as a search result;

and

a transmission means transmitting the search result back to a relevant terminal

apparatus.

Reason for Allowable

4. The following is an examiner's statement of reasons for allowance:

In the Examiner's Office Action for Final Rejection of May 12, 2005, 35 U.S.C. 35

U.S.C. § 102 and § 103, rejections was primarily based on the reference of Biderman et

a. (U.S. Patent Application 2001/0037325 A1, "METHOD AND SYSTEM FOR

LOCATING INTERNET USERS HAVING SIMILAR NAVIGATION PATTERNS",

Published on November 1, 2001, hereafter "Biderman") and further in view of references

of Hasegawa et al. (U.S. Patent 6,513,038 B1, "SCHEME FOR ACCESSING DATA

MANAGEMENT DIRECTORY", Issued on January 28, 2003, hereafter "Hasegawa"),

Cusson et al. (U.S. Patent 6,487,641 B1, "DYNAMIC CACHES WITH MISS TABLES",

Issued on November 26, 2002, hereafter "Cusson") and Sundaresan (U.S. Patent

6,487,566 B1, "TRANSFORMING DOCUMENTS USING PATTERN MATCHING AND

A REPLACEMENT LANGUAGE", Issued on November 26, 2002).

In the Remarks filed on October 11, 2005, the Applicant specifically pointed out that

the references either individually or in combination does not teach the following

combined feature of each of the independent claims 25, 30, 35, 40-41 and 46:

a search-query-formula variable table containing and correlating:

a first search-query formula describing the search-pattern in a form using the first

variable; and

a second variable that makes the first search-query formula the associated value, and

further correlates the terminal apparatus identifier with a second search-query-formula

describing the first search-query-formula in a form using the second variable and the

second variable that makes the first search-query-formula the

associated value.

After further review of the search results previously conducted and Applicant's most

currently amended claims, and consideration of the above Remarks, the Examiner is

convinced that the prior art made of record does not teach the elements as described.

An expanded and update search for the prior arts on EAST database and on domains

(EAST, NPL-ACM, Google, NPL-IEEE, Oracle, etc.) has been conducted. The prior arts

searched and investigated in the database and domains does not fairly teach or suggest

the teaching of the combined feature as claimed in the independent claims 25, 30, 35,

40-41 and 46.

The dependent claims in the groups 26-29, 31-34, 36-39 and 42-45, depending

claims 25, 30, 35 and 41, respectively, also distinct from the prior art for the same

reason.

5. Any comments considered necessary by applicant must be submitted no later than

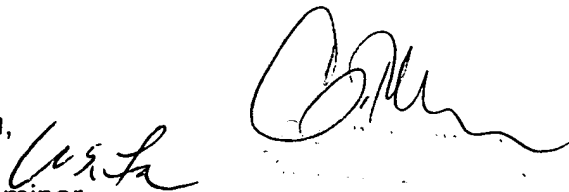the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Kuen S. Lu whose telephone number is (571) 272-4114. The examiner can normally be reached on Monday-Friday (8:30 am - 5:30 pm). If attempts to reach the examiner by telephone pre unsuccessful, the examiner's Supervisor, Jean R. Homere, Esq. can be reached on (571) 272-3780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for Page 13 published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact he Electronic Business Center (EBC) at 886-217-9197 (toll-free).

Kuen S. Lu,
Patent Examiner,

December 20, 2005